INTERNATIONAL SEARCH REPORT

tnterner pplication No PCT/US 02/30659

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 F16B19/10									
According to International Patent Classification (tPC) or to both national classification and IPC									
B. FIELDS SEARCHED									
Minimum documentation searched (classification system followed by classification symbols) IPC 7 F16B B60R									
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched									
Electronic da	ata base consulted during the international search (name of data base	e and, where practical, search terms used)							
EPO-Internal									
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT		·						
Category *	Citation of document, with indication, where appropriate, of the rele	vant passages	Relevant to claim No.						
X	US 4 405 272 A (WOLLAR BURNELL J)		1-4						
γ	20 September 1983 (1983-09-20) abstract		5						
	column 4, line 7 - line 50 column 6, line 21 - line 56 figures								
Υ	US 3 385 157 A (RAPATA GEORGE M) 28 May 1968 (1968-05-28) column 3, line 22 - line 39 figures	·	5						
Х	US 5 568 675 A (ASAMI GORO ET AL 29 October 1996 (1996-10-29) abstract column 3, line 29 -column 4, line column 4, line 54 -column 5, line figures	9	1,4,6						
Further documents are listed in the continuation of box C. Patent family members are listed in annex.									
'A' docume consider in the consideration in the considera	ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date and which may throw doubts on priority claim(s) or is cited to establish the publication date of another or or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filling date but han the priority date claimed	*T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention. *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone. *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family							
Date of the	actual completion of the international search	Date of mailing of the international search report							
27 November 2002		05/12/2002							
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentilaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax. (+31-70) 340-3016		Authorized officer Granger, H	i						

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Information on patent tamily members

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